

ABSTRACT

Animals were immunized with either the A or B chain of a receptor, and then mRNA was extracted from the spleen cells of the animals, and the variable regions of the L and H chains were isolated by RT-PCR using primers for variable regions comprising CDRs. Single-chain Fv was synthesized by assembly PCR to construct a phage library. Clones for antigen-bound antibodies were concentrated and cloned by panning. An expression vector for scFv-CH1-Fc was prepared by inserting a single-chain variable region between CH1-hinge-CH2-CH3 and the signal sequence for animal cells. Various combinations of such expression vectors were introduced into cells to express antibodies, and antibody clones exhibiting ligand-like activity were selected.